



UNITED STATES PATENT AND TRADEMARK OFFICE

80

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,489	02/27/2002	Masaki Tonomura	1095.1213	5927
21171	7590	08/10/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,489

Applicant(s)

TONOMURA, MASAKI

Examiner

John J. Romano

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-15 are pending in this action.

Prior Art's Arguments – Rejections

1. Applicant's arguments filed May 6th, 2005, in particular on pages 7-11, have been fully considered but they are not persuasive. For example,

(A) As to independent claims 1, 9, 11 and 13, Applicant submits that *Weinberg* does not disclose “*generating candidate data for data to be inputted into the data input area based on the attribute information of the data input area*”, (See page 7, fourth paragraph, of the response), which examiner strongly disagrees. Examiner acknowledges that *Weinberg* is directed to a computer-implemented method for facilitating generation of an automated test for testing functionality of a server, wherein the method employs a testing tool that records a series of user steps executed during a user session with a server. However, this does not mean data is not generated. In fact, this is a method of generating test data based on the type of parameter or the attribute information of the data input area, wherein the data is generated from the user as disclosed by *Weinberg* (Column 2, lines 53-56), wherein “An important benefit of this feature is that it allows the user to *generate* and edit tests...”.

In regards to the section cited by the examiner as stated in the response (page 8, first paragraph), the section discloses the process of taking the candidate data generated by the user and illustrates how it is specific to the data to be input, wherein “...a data entry node includes the object identifier and the data to be entered...”, wherein the data to

be entered is the candidate test data to be inputted. Moreover, Applicant states "...The data to be entered within the nodes is merely the same data entered by a user during the user session. Applicant then concludes "Thus, the data within the nodes is not generated", which Examiner strongly disagrees. The Examiner reasserts that the user, as disclosed by *Weinberg* above, generates the data within the nodes which is input into the data input area based on the type of input. Therefore, *Weinberg* discloses "*generating candidate data for data to be inputted into the data input area based on the attribute information of the data input area*", as recited in independent claims 1, 9, 11 and 13. Thus, Examiner maintains the rejections to independent claims 1, 9, 11 and 13 as addressed above and rejected below.

(B) As to dependent claim 2, the Examiner reasserts and maintains the rejection as addressed above in section (A) with respect to Applicants' argument (page 8, third paragraph of the response), that "Weinberg merely discloses generating nodes, not data pertaining to attribute information". Moreover, with respect to Applicants' argument that *Weinberg* does not teach "wherein the step of generating the candidate data comprises a step of generating data matching the attribute information and data not matching the attribute information", Examiner reasserts the rejection from the previous office action wherein *Weinberg* discloses a result of True if the data matches and a result of Not true if it does not. Thus, the rejection of claim 2 is maintained by the Examiner.

(C) As to independent claims 3, 10, 12 and 14, Applicant submits that *Weinberg* does not teach "determining details of an operation input for requesting the server computer to carry out a process when the operation input is applied to the document

browsing device”, which Examiner disagrees. Applicant contends that the cited section (columns 9-10) refers to the submission of a data form or type (e.g., a link type to a website. The Examiner would like to draw Applicants’ attention to the Submit Data step included in Table 2, Column 9, wherein the properties of the data argument are included comprising type of each data argument on form or the details are specified (determined) of a data input which is to be processed at the web site, wherein the data input to be processed in the form is the operation input. Therefore, the Examiner maintains the rejections of independent claims 3, 10, 12 and 14 as provided herein and below.

(D) As to dependent claims 4, which depends from claim 3, it is not patentable over Weinberg for at least the reasons offered with respect to claim 3 above in section (C). Similarly, claims 5 and 6, which depend from claim 3, are likewise not patentable over Weinberg for at least the reason offered above with respect to independent claim 3 and further as rejected below in the Claim Rejections. Likewise, the rejection of claim 7 is maintained.

(E) In regard to claim 8, Examiner withdraws the rejection with respect to Weinberg in view of Kake et al. as the priority date of Applicant’s patent application is prior to the filing date of Kake. This was indeed an oversight by the Examiner, however claim 8 is rejected on grounds of new art as disclosed in the Claim Rejections section below.

(F) In regard to claims 1, 2, 9, 11 and 13 as being anticipated by Murashi, the Applicant submits that the screen definition information is not attribute information of a data input area, as recited in the claims of the present invention, which Examiner

Art Unit: 2192

disagrees. As recited by Examiner in the rejection, paragraph [0062] discloses a class name, which is attribute information. Thus, Examiner maintains the rejection in regards to claims 1, 2, 9, 11 and 13. Claims 2 depends from independent claim 1 and is the rejection is thus maintained as well over the reference for at least the reason offered. Likewise, the rejections of Claims 3, 7, 10, 12 and 14 are maintained as well.

(G) In regard to claim 15, claim 15 is rejected for at least the reasons stated above in regard to “generating candidate data for data to be inputted into the data input area based on the acquired information” and as disclosed in the Claim Rejections section below.

Claim Rejections

Claims 1-15 are pending in this action.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2192

2. Claims 1-4 and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Weinberg et al., US 6,587,969 B1 (hereinafter **Weinberg**).

3. In regard to claims 1, 9, 11 and 13 **Weinberg** discloses:

- “... *for assisting in testing operation of a server computer which provides services using a structured document which can be browsed by a document browsing device, the test assisting program enabling a computer to carry out a process comprising steps of...*”, (E.g., see Figure 6C & Column 2, lines 23-35), wherein the testing tool comprises a test assisting program and the structured documents are the programs for the web pages displayed by the web browser.
- “... *acquiring attribute information of a data input area of the structured document upon reception of the structured document from the server computer ...*”, (E.g., see Figure 6C & Column 21, lines 35-46), wherein the data to be entered would comprise attribute type or information for the input to the structured document from the server.
- “... *generating candidate data for data to be inputted into the data input area based on the attribute information of the data input area ...*”, (E.g., see Figure 8 & Column 21, line 46 – Column 22, line 7), wherein the data references associated with the function call, associated with data tables in the input/output data library, are generated and (Column 2, lines 53-56), wherein “An important benefit of this feature is that it allows the user to *generate* and edit tests...”.

- "... *inserting a processing description for enabling the document browsing device to carry out a process of displaying the candidate data and a process of entering the candidate data selected by an operation input into the data input area, in the structured document...*", (E.g., see Figure 3B & Column 19, lines 32-52), wherein the loop object provides instructions for input data to the browser to display a structured document or view of a webpage.
- "... *transferring the structured document with the processing description inserted therein to the document browsing device .*", (E.g., see Figure 6C & Column 22, lines 22-36), wherein the testing tool is the processing description to test a structured document and is shown in Figure 6C being communicated to a server, thus transferred.

4. In regard to claim 2, the rejections of base claim 1 are incorporated. Furthermore, **Weinberg** discloses:

- "... *generating data matching the attribute information and data not matching the attribute information.*", (E.g., see Figure 4A & Column 15, lines 15-34), wherein the result is "TRUE" if the data matches or "NOT TRUE" if it does not.

5. In regard to claims 3, 10, 12 and 14 **Weinberg** discloses:

- "... *determining details of an operation input for requesting the server computer to carry out a process when the operation input is applied to the document browsing device...*", (E.g., see Table 2 & Column 9 – Column 10), wherein the "Submit Data" step comprises input data submitted to the server

and “Text check”, “Image Check” and “Applet Check” perform processes with the applied input.

- “... *generating a log file in which the determined details of the operation input are recorded...*”, (E.g., see Figure 7 & Column 23, lines 11-19), wherein a log file is generated from the test results.
- “... *reproducing the operation input applied to the document browsing device according to the details of the operation input which are recorded in the log file.*”, (E.g., see Figure 10 & Column 24, lines 45-51), wherein the spreadsheet location may be the test results recorded in the log file.

6. In regard to claim 4, the rejections of base claim 3 are incorporated. Furthermore,

Weinberg discloses:

- “...*an object to be operated on is displayed in highlight for a predetermined period of time when the operation input is reproduced.*”, (E.g., see Column 16, lines 44-46), wherein when the test is played back or reproduced and the corresponding objects or steps are highlighted. The predetermined time period is the duration of the execution of that particular step.

7. In regard to claims 9 and 10, they are system versions of the process of claims 1 and 3 respectively. Therefore, the limitations of claims 9 and 10 are met accordingly.

8. In regard to claims 11 and 12, they are apparatus versions of the process of claims 1 and 3 respectively. Therefore, the limitations of claims 11 and 12 are met accordingly.

9. In regard to claims 13 and 14, they are product versions of the process of claims 1 and 3 respectively. Therefore, the limitations of claims 13 and 14 are met accordingly.

Art Unit: 2192

10. In regard to claim 15, Weinberg discloses:

- *“A method for testing operation of a server computer from a browsing computer, comprising: acquiring information of a data input area upon reception of a document from the server computer ...”,* (E.g., see Figure 6C & Column 21, lines 35-46), wherein the data to be entered would comprise attribute type or information for the input to the structured document from the server.
- *“... generating candidate data for data to be inputted into the data input area based on the acquired information.”,* (E.g., see Figure 8 & Column 21, line 46 – Column 22, line 7), wherein the data references associated with the function call, associated with data tables in the input/output data library, are generated and (Column 2, lines 53-56), wherein “An important benefit of this feature is that it allows the user to *generate* and edit tests...”.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinberg** in view of obviousness.

13. In regard to claim 5, the rejections of base claim 4 are incorporated. But **Weinberg** does not expressly disclose "...the operation input is prevented from being reproduced until the display in highlight of the object to be operated on is finished.". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to prevent the next operation or input operation from being performed until the previous step or decision was completed or confirmed. The motivation to do so would have been to complete an iteration of the test before entering another input to begin another iteration. This would be consistent with certain testing phases of a web browser as it is often beneficial to test one thing at a time. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to prevent an input operation from being reproduced until the highlighted display of a step or object is finished.

14. In regard to claim 6, the rejections of base claim 3 are incorporated. Furthermore, **Weinberg** discloses:

- "...wherein when a process result is returned from the server computer due to the reproduced operation input, the test assisting program enables the computer to compare the process result and a past process result returned from the server computer due to the operation input...", (E.g., see Figures 5C-E & Column 19, lines 12-31), wherein the output of the test and verify expression or comparison definition are returned due to the input.

But **Weinberg** does not expressly disclose “...*and display a difference between the compared process results.*”. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to customize the comparison by displaying the difference if appropriate. The motivation is disclosed by **Weinberg**, “The expert mode allows the user to...make modifications to the text. The user can thereby create functions and queries that may not be part of the automated features of the test to provide a higher level of test customization.”, (Column 20, lines 7-11). Thus, if a display of the difference would be beneficial the suggestion to customize the function was evident. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to customize the display to incorporate the difference of the compared results.

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinberg** in view of Dantressangle, US 6,446,120 B1 (hereinafter **Dantressangle**).

16. In regard to claim 7, the rejections of base claim 3 are incorporated. But **Weinberg** does not expressly disclose “...*to measure a time from a decision in the operation input for requesting the server computer to carry out the process until a process result is returned from the server computer, and display the measured time.*”. However, **Dantressangle** discloses:

- “...*to measure a time from a decision in the operation input for requesting the server computer to carry out the process until a process result is returned from the server computer, and display the measured time.*”, (E.g., see Figure 7 & Column 8, lines 41-60), wherein a timer function is used to provide a report or display the measured time.

Art Unit: 2192

Weinberg and **Dantressangle** are analogous art because they are both concerned with the same field of endeavor, namely, testing a web server. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine a measured time with **Weinbergs'** testing method and display. The motivation is disclosed by **Weinberg**, "The expert mode allows the user to...make modifications to the text. The user can thereby create functions and queries that may not be part of the automated features of the test to provide a higher level of test customization.", (Column 20, lines 7-11).

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinberg** in view of Gough et al., US 6,072,489, (hereinafter **Gough**).

18. In regard to claim 8, the rejections of base claim 3 are incorporated. But **Weinberg** does not expressly disclose "...to render translucent an operation view for entering the operation input and display the translucent operation view.". However, ^{Gough} ~~Katze~~ ^{Man} discloses:

- "...to render translucent an operation view for entering the operation input and display the translucent operation view.", (E.g., see Figure 3b & Column 3, line 66- Column 4, line 5), wherein two objects are overlapped making them translucent for entering data input.

Weinberg and **Gough** are analogous art because they are both concerned with the same field of endeavor, namely, a program, which gathers information and displays them in a window viewing environment. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine a translucent display with **Weinbergs** testing method and display. The motivation is disclosed by **Weinberg**, "The expert mode allows the user to...make modifications to the text. The user can thereby create functions and queries

Art Unit: 2192

that may not be part of the automated features of the test to provide a higher level of test customization.”, (Column 20, lines 7-11).

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20. Claims **1, 2, 9, 11** and **13** are rejected under 35 U.S.C. 102(e) as being anticipated by Muraishi et al., US 2001/0028359 A1 (hereinafter **Muraishi**).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

21. In regard to claims **1, 9, 11** and **13**, **Muraishi** discloses:

- “... *for assisting in testing operation of a server computer which provides services using a structured document which can be browsed by a document browsing device, the test assisting program enabling a computer to carry out a process comprising steps of...*”, (E.g., see Figure 1 & Page 3, Paragraph [0053]), wherein the structured document is the screen program and the document browsing device is the GUI.
- “... *acquiring attribute information of a data input area of the structured document upon reception of the structured document from the server computer ...*”, (E.g., see Figure 4 & Page 3, Paragraph [0060] and [0086]), wherein a server environment is disclosed.
- “... *generating candidate data for data to be inputted into the data input area based on the attribute information of the data input area ...*”, (E.g., see Figure 4 & Page 3, Paragraph [0062]), wherein the input data file is the candidate data and is based on the screen definition information or attribute information.
- “... *inserting a processing description for enabling the document browsing device to carry out a process of displaying the candidate data and a process of entering the candidate data selected by an operation input into the data input area, in the structured document...*”, (E.g., see Figure 3 & Page 3, Paragraph [0064] and [0066]).
- “... *transferring the structured document with the processing description inserted therein to the document browsing device .*”, (E.g., see Page 5,

Paragraph [0086]), wherein it is inherent that in a server environment data is transferred.

22. In regard to claim 2, the rejections of base claim 1 are incorporated. Furthermore, **Muraishi** discloses:

- "... *generating data matching the attribute information and data not matching the attribute information.*", (E.g., see Figure 9 & Page 4, Paragraph [0078]), wherein both cases are disclosed.

23. In regard to claim 15, Muraishi discloses:

- "*A method for testing operation of a server computer from a browsing computer, comprising: acquiring information of a data input area upon reception of a document from the server computer ...*", (E.g.; see Figure 4 & Page 3, Paragraph [0060] and [0086]), wherein a server environment is disclosed.

"... *generating candidate data for data to be inputted into the data input area based on the acquired information.*", (E.g., see Figure 4 & Page 3, Paragraph [0062]), wherein the input data file is the candidate data and is based on the screen definition information or attribute information.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2192

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 3, 7, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

Muraishi in view of obviousness.

26. In regard to claims 3, 10, 12 and 14 **Muraishi** discloses:

- "... *determining details of an operation input for requesting the server computer to carry out a process when the operation input is applied to the document browsing device...*", (E.g., see Figure 10 & Page 4, Paragraph [0080]), wherein input information or details are embedded in a input area of a screen program or browsing device.
- "... *the determined details of the operation input are recorded...*", (E.g., see Figure 5 & Page 3, Paragraph [0066]), wherein the test results are recorded.
- "... *reproducing the operation input applied to the document browsing device according to the details of the operation input which are recorded...*", (E.g., see Figure 5 & Page 3, Paragraph [0066]), wherein the execution result of the previous test results are used and recorded.

But **Muraishi** does not expressly disclose a "...log file.". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to save the execution data in a log file. The motivation to do so would have been to use the results for another test as disclosed by **Muraishi** (Page 3, Paragraph [0066]). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to save the data in a log file.

Art Unit: 2192

27. In regard to claim 7, the rejections of base claim 3 are incorporated. Furthermore,

Muraishi discloses:

- "...to measure a time from a decision in the operation input for requesting the server computer to carry out the process until a process result is returned from the server computer, and display the measured time....", (E.g., see Figures 30 & Page 7, Paragraph [0120])), wherein the output of the time measurement is disclosed.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Miller, US 5,652,835, wherein candidate test data for software testing based on incorrect and correct inputs is generated.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJR

A handwritten signature in black ink, reading "Hoangm Anthony Nguyenba". The signature is fluid and cursive, with a long horizontal stroke at the end.

ANTONY NGUYEN-BA
PRIMARY EXAMINER